Docket No. 740756-2183 Serial No. 09/620,968

IN THE CLAIMS:

1. (Canceled)

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2. (Previously Presented) A method for manufacturing a semiconductor device comprising the step of:

forming an insulating film comprising silicon nitride over a semiconductor by sputtering in an atmosphere comprising nitrogen at 75 volume % or more.

- 3. (Previously Presented) A method according to claim 2 wherein the sputtering is performed by an RF sputtering method.
- 4. (Previously Presented) A method according to claim 2 wherein the semiconductor device is incorporated into an active matrix display device.
- 5. (Previously Presented) A method for manufacturing a semiconductor device comprising the step of:

forming an insulating film comprising silicon nitride over a semiconductor by sputtering in an atmosphere comprising nitrogen at 75 volume % or more and argon at 25 volume % or less.

- 6. (Previously Presented) A method according to claim 5 wherein the sputtering is performed by an RF sputtering method.
- 7. (Previously Presented) A method according to claim 5 wherein the semiconductor device is incorporated into an active matrix display device.
- 8. (Previously Presented) A method according to claim 5 wherein the atmosphere further comprises a halogen compound gas at 0.2 to 20 volume %.

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9. (Previously Presented) A method for manufacturing a semiconductor device comprising the steps of:

forming an insulating film comprising silicon nitride over a semiconductor by sputtering in an atmosphere comprising nitrogen at 75 volume % or more; and

forming an electrode comprising aluminum over the insulating film.

- 10. (Previously Presented) A method according to claim 9 wherein the sputtering is performed by an RF sputtering method.
- 11. (Previously Presented) A method according to claim 9 wherein the semiconductor device is incorporated into an active matrix display device.
- 12. (Previously presented) A method for manufacturing a semiconductor device comprising the steps of:

forming an insulating film comprising silicon nitride over a semiconductor by sputtering in an atmosphere comprising nitrogen at 75 volume % or more and argon at 25 volume % or less; and

forming an electrode comprising aluminum over the insulating film.

- 13. (Previously Presented) A method according to claim 12 wherein the sputtering is performed by an RF sputtering method.
- 14. (Previously Presented) A method according to claim 12 wherein the semiconductor device is incorporated into an active matrix display device.
- 15. (Previously Presented) A method according to claim 12 wherein the atmosphere further comprises a halogen compound gas at 0.2 to 20 volume %.
- 16. (Previously presented) A method for manufacturing a semiconductor device comprising the step of:

forming a transistor, and

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forming an insulating film comprising silicon nitride over the transistor by sputtering in an atmosphere comprising nitrogen at 75 volume % or more.

- 17. (Previously Presented) A method according to claim 16 wherein the sputtering is performed by an RF sputtering method.
- 18. (Previously Presented) A method according to claim 16 wherein the semiconductor device is incorporated into an active matrix display device.
- 19. (Previously Presented) A method for manufacturing a semiconductor device comprising the steps of:

forming a transistor; and

forming an insulating film comprising silicon nitride over the transistor by sputtering in an atmosphere comprising nitrogen at 75 volume % or more and argon at 25 volume % or less.

- 20. (Previously Presented) A method according to claim 19 wherein the sputtering is performed by an RF sputtering method.
- 21. (Previously Presented) A method according to claim 19 wherein the semiconductor device is incorporated into an active matrix display device.
- 22. (Previously Presented) A method according to claim 19 wherein the atmosphere further comprises a halogen compound gas at 0.2 to 20 volume %.
- 23. (Previously Presented) A method according to claim 8, wherein the halogen compound gas is selected from the group consisting of NF₃, N₂F₄, HF, chloro-fluoro carbon, F₂, CCl₄, Cl₂ and HCl.

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- 24. (Previously Presented) A method according to claim 15, wherein the halogen compound gas is selected from the group consisting of NF₃, N₂F₄, HF, chloro-fluoro carbon, F₂, CCl₄, Cl₂ and HCl.
- 25. (Previously Presented) A method according to claim 22, wherein the halogen compound gas is selected from the group consisting of NF₃, N₂F₄, HF, chloro-fluoro carbon, F₂, CCl₄, Cl₂ and HCl.
- 26. (Previously Presented) A method according to claim 2, wherein the sputtering is performed by using a target comprising silicon nitride.
- 27. (Previously Presented) A method according to claim 5, wherein the sputtering is performed by using a target comprising silicon nitride.
- 28. (Previously Presented) A method according to claim 9, wherein the sputtering is performed by using a target comprising silicon nitride.
- 29. (Previously Presented) A method according to claim 12, wherein the sputtering is performed by using a target comprising silicon nitride.
- 30. (Previously Presented) A method according to claim 16, wherein the sputtering is performed by using a target comprising silicon nitride.
- 31. (Previously Presented) A method according to claim 19, wherein the sputtering is performed by using a target comprising silicon nitride.
- 32. (New) The method for manufacturing a semiconductor device according to claim 2, further comprising:

forming a semiconductor doped with phosphorus between the insulating film and the semiconductor.

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33. (New) The method for manufacturing a semiconductor device according to claim 5, further comprising:

forming a semiconductor doped with phosphorus between the insulating film and the semiconductor.

34. (New) The method for manufacturing a semiconductor device according to claim 9, further comprising:

forming a semiconductor doped with phosphorus between the insulating film and the semiconductor.

35. (New) The method for manufacturing a semiconductor device according to claim 12, further comprising:

forming a semiconductor doped with phosphorus between the insulating film and the semiconductor.

36. (New) The method for manufacturing a semiconductor device according to claim 16, further comprising:

forming a semiconductor doped with phosphorus between the insulating film and the transistor.

37. (New) The method for manufacturing a semiconductor device according to claim 19, further comprising:

forming a semiconductor doped with phosphorus between the insulating film and the transistor.